

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-3, 8-10, 14, 24, 30 and 32-34 are presently active in this case. The present Amendment amends Claims 1 and 14; and adds new Claims 32-34 without introducing any new matter; and cancels Claims 12-13 and 20 without prejudice or disclaimer.

The final Office Action of April 6, 2006 rejected Claims 15-19, 21-23, 25-29 and 31 were rejected under 35 U.S.C. §102(b) as anticipated by Ezer et al. (U.S. Patent No. 6,275,239, herein "Ezer"), and Claims 1-3, 6-14, 20, 24, and 30 were rejected under 35 U.S.C. §103(a) as unpatentable over Ezer.

The Advisory Action of June 23, 2006 upheld the rejections made in April 6, 2006 Office Action, in response to an Amendment filed under 37 C.F.R. §1.111 on June 5, 2006.

To clarify Applicant's invention, independent Claim 1 is amended to further recite "wherein a space required in the instruction memory and the data memory of the internal memory for the instructions and the data of the audio process for the next one of the procedures is reserved by the control processor, thereby configured to allow preparation of the data and the instructions in the internal memory before the next one of the procedures starts." These features find non-limiting support in Applicant's disclosure as originally filed, for example from page 19, line 20, to page 21, line 21, and in corresponding Figure 4A-4B. In addition, the features regarding the DMA controller of independent Claim 1 are now recited in new dependent Claim 32. Furthermore, Claims 12-13 and 20 are cancelled without prejudice or disclaimer.

In light of the amendments to independent Claim 1, Applicant respectfully traverses the rejection of Claims 1-3, 8-10, 14, 24, and 30 under 35 U.S.C. §103(a), and requests reconsideration thereof, as next discussed.

Briefly recapitulating, amended Claim 1 relates to an audio processor which processes an input data stream via an external memory. The audio processor includes, *inter alia*: control processor to fetch in, when executing one of divided procedures of an audio process, a program and audio data corresponding to a next one of the procedures from the external memory which stores programs and a group of data used for sequentially executing the divided procedures of the audio process; an internal memory including instruction memory and data memory; wherein ***a space required in the instruction memory and the data memory*** of the internal memory for the instructions and the data of the audio process for the next one of the procedures ***is reserved by the control processor***, thereby configured to allow preparation of the data and the instructions in the internal memory ***before the next one of the procedures starts***.

Turning now to the applied reference, Ezer describes a media coprocessor for performing 3-D graphics, video, and audio functions, wherein audio and video data are processed in different partitions of a time interval.¹ Ezer further explains that the IO controller 104 is an intelligent DMA engine that transfers data between memory buffers and IO interfaces.² However Applicant respectfully submits that Ezer does not teach or suggest:

a space required in the instruction memory and the data memory
of the internal memory for the instructions and the data of the audio
process for the next one of the procedures ***is reserved by the control***
processor, thereby configured to allow preparation of the data and the
instructions in the internal memory ***before the next one of the procedures***
starts;

as recited in amended independent Claim 1. Ezer merely shows a DMA unit 411, and explains that a bus 410 is coupled to a DMA unit 411, which is itself coupled to a bus 404 and another bus 412. Ezer further describes that a small amount of resident dispatcher code 701 in the media digital signal processor (MSP) instruction memory 702 reads code for the

¹ See Ezer in the Abstract, and in Figure 1.

² See Ezer at column 3, lines 35-37, and in Figure 1.

next function to be performed from a task list updated by the central processing unit (CPU),³ and subsequently, the MSP initiates a DMA transfer of the task code into the instruction memory 702.⁴ Ezer also explains that the task initiates DMA transfers of input data buffers from DRAM 707 to data memory 708.⁵ In other words, a dispatcher transfers a task code for a next function to the instruction memory, and no memory space of the instruction memory is thereby reserved.

In contrast, independent Claim 1 clearly recites that *a space required in the instruction memory and the data memory* of the internal memory for the instructions and the data of the audio process for the next one of the procedures *is reserved by the control processor*. Ezer therefore fails to teach or suggest all the features of independent Claim 1.

Therefore, Ezer fails to teach or suggest every feature recited in Applicant's claims, so that independent Claim 1 and all associated dependent claims are believed to be patentably distinct over the applied reference. Accordingly, Applicant respectfully traverses, and requests reconsideration of, the rejection based on Ezer.⁶

To vary the scope of protection recited in the claims, new Claims 33 and 34 are added. New Claim 33 depends upon Claim 32 and recites "the control processor reserves the internal memory by sending an instruction to the DMA memory."⁷ New Claim 34 depends upon Claim 1 and recites features regarding five different processing stages.⁸ Since new Claims 33 and 34 find non-limiting support in the disclosure as originally filed, they are not believed to raise a question of new matter.⁹

³ See Ezer at column 10, lines 21-25 and in Figure 7.

⁴ See Ezer at column 10, lines 25-28.

⁵ See Ezer at column 10, lines 28-32.

⁶ See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," (Citations omitted) (emphasis added). See also MPEP 2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art."

⁷ Finds non-limiting support in Applicant's specification as originally filed, for example at page 21, lines 10-17.

⁸ Idem from page 23, line 24, to page 24, line 14, and in corresponding Figure 5.

⁹ See MPEP 2163.06 stating that "information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter."

In addition, it is believed that the applied reference is silent on the features presented in new dependent Claims 33-34. For example, Claim 34 recites that the divided procedures of the audio process include five different processing stages performed sequentially, and that the five different processing stages using different memory spaces of the data memory in the internal memory. Ezer explains that audio data is processed during one partition of an interval, and the video data during another partition.¹⁰ In addition, Ezer's audio data processing partition 503 or audio task 705 are processed subsequently to other image processing, as shown in Ezer's data flow of Figure 9, and further explained at column 11, lines 24-42. Accordingly, Ezer fails to teach or suggest that the audio process include five different processing stages performed sequentially, as recited in dependent Claim 34.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-3, 8-10, 14, 24, 30 and 32-34 is earnestly solicited.

¹⁰ See Ezer in the Abstract, lines 9-11, and in Figure 5.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

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